

for hospitalizations). **CONCLUSIONS:** Kidney transplantation substantially changes the composition of costs associated to patients affected by end stage renal disease, dramatically reducing the costs of diagnostic/therapeutic procedures and increasing drug expenditure. When evaluating the increase in hospitalization costs, the incidence of transplantation expenditure should be considered. Speculatively, it should be expected that in the following years the per-patient cost would decrease thanks to savings following the reduction in dialysis costs.

**PUK34****CROSS-SECTIONAL DESCRIPTIVE STUDY OF THE IMPACT OF ANAEMIA IN PATIENTS WITH CHRONIC KIDNEY DISEASE ON HEALTHCARE RESOURCE UTILISATION AND WORK PRODUCTIVITY ACROSS EUROPE**

Eriksson D<sup>1</sup>, Teitsson S<sup>1</sup>, Goldsmith D<sup>2</sup>, Jackson J<sup>3</sup>, van Nooten FE<sup>4</sup>

<sup>1</sup>Quantify Research, Stockholm, Sweden, <sup>2</sup>Guy's and St Thomas' NHS Foundation Hospital, London, UK, <sup>3</sup>Adelphi Group, Bollington, UK, <sup>4</sup>Astellas Pharma BV, Leiden, The Netherlands

**OBJECTIVES:** To evaluate the impact of anaemia on healthcare resource utilisation and work productivity in patients with chronic kidney disease (CKD) stages 3 and 4, and patients on dialysis. **METHODS:** A descriptive, cross-sectional analysis was performed using data from the Adelphi CKD Disease Specific Programme in France, Germany, Italy, Spain, and UK between June and September 2012. Healthcare resource utilisation data was extracted from patient self-completion questionnaires and physician-completed patient record forms. Absenteeism and work-related activity impairment data were obtained from the Work Productivity and Activity Impairment questionnaire. **RESULTS:** A total of 1336 patient self-completed questionnaires were received from an evaluable population of 2898 CKD patients (stage 3, 4, and on dialysis). Across all patient sub-groups, anaemic patients accrued more nephrologist visits over 12 months, compared to non-anaemic patients (2.7 vs. 1.1). Anaemic patients also experienced a higher number of visits to a general practitioner (3.5 vs. 2.9). Stratification of the data, by haemoglobin (Hb) level and dialysis status, revealed that the number of all-cause hospitalisations was consistently higher for patients with Hb levels of <10 g/dL, compared to those with Hb levels of ≥12 g/dL, irrespective of dialysis treatment (0.7 vs. 0.2 and 0.9 vs. 0.5 admissions for non-dialysis and dialysis subjects, respectively). Anaemic CKD stage 4 and dialysis patients <65 years, had higher rates of work absenteeism compared with non-anaemic patients (3.6% vs. 2.4% stage 4 and 14.6% vs. 7.6% dialysis). Anaemia caused greater activity impairment ( whilst working) among CKD stage 3 patients (23.6% anaemic vs. 14.7%) and stage 4 patients (26.4% anaemic vs. 20.0%), compared with dialysis patients (37.2% anaemic vs. 44.6%). **CONCLUSIONS:** Anaemia may have a substantial impact on healthcare resource utilisation and work productivity in patients with CKD. Further studies are warranted to evaluate the humanistic impact and direct economic burden of anaemia in CKD.

**PUK35****ECONOMIC EVALUATION OF HEALTH SPENDING AND HEALTH OUTCOMES IN THE MANAGEMENT OF HEMODIALYSIS FOR TWO INSURANCE COMPANIES IN COLOMBIA**

Acuna L<sup>1</sup>, Bryon A<sup>2</sup>

<sup>1</sup>cuenta de alto costo, bogota, Colombia, <sup>2</sup>Heort, Bogota, Colombia

**OBJECTIVES:** Determine the health impact through an economic evaluation in relation to expenditure and quality of care for patients with chronic kidney disease (CKD) on hemodialysis two insurers and their network of providers between 2013 and 2014. **METHODS:** The information system containing data tracking high-cost diseases in the Colombian health system, an economic tool was generated with the methodological parameters recommended by WHO to assess populations with CKD stage 5: 22926 patients (2013) and 23478 (2014), which were selected on hemodialysis 1043/16029 (6.51%) and 1673/16334 (10.24%) respectively. The analysis included comparisons of clinical outcomes, cost-effectiveness ratio (CER) and incremental cost effectiveness ratio (ICER) between 5 providers and 58 renal units. **RESULTS:** Comparing scenarios 2 insurance providers found that in RCE there is a difference range from US\$ 3.272,28 to US\$ 4.586,69 patient year (2013) and from US\$ 10,93 to US\$ 3.980,30 patient year (2014). The ICER was cost-saving scenarios in a difference of US\$ 22.880,00 (2013) and US\$ 69.733,80 (2014) and in non-cost effective difference per patient year it was US\$ 158.145,07 (2013) and the actual cost difference per patient year was US\$ 3.960,00 (2014). Additionally it was noted that the insurance1 vs. insurance2 was saving the cost and RCE had a difference of US\$ 1.086,54 per patient year (2013), then noted that insurance1 vs. the insurance2 proved to be highly cost effective and RCE had a difference of US\$ 2.340,04 per patient year (2014). **CONCLUSIONS:** 1) To support the evaluation of healthcare programs that hire insurance, 2) Complement health evaluation results through the economic evaluation of health care programs and 3) Identify what kind of joint venture agreement may be useful for the management of high-cost diseases.

**RESEARCH POSTER PRESENTATIONS – SESSION III****HEALTH CARE USE & POLICY STUDIES****HEALTH CARE USE & POLICY STUDIES – Consumer Role in Health Care****PHP1****PATIENT INVOLVEMENT WITH PHARMACEUTICAL INDUSTRY DRUG DEVELOPMENT AND RESEARCH: A REVIEW OF THE LITERATURE**

Foley K<sup>1</sup>, Holyk G<sup>2</sup>, Langer G<sup>2</sup>

<sup>1</sup>Pfizer, Philadelphia, PA, USA, <sup>2</sup>Langer Research Associates, New York, NY, USA

**OBJECTIVES:** To better understand the views of various stakeholders on patient involvement in pharmaceutical industry research and to describe the current state of knowledge of best practices. **METHODS:** A targeted review of the literature on patient involvement with pharmaceutical drug development and research. Approximately 150 articles were reviewed, including academic journal

articles; corporate, foundation and government reports; and existing literature reviews. **RESULTS:** Preliminary results demonstrate a growing recognition within the industry of the value of understanding patient experiences and perspectives. Patient involvement in research varies tremendously, from superficial and tokenistic to highly substantive (e.g., patient involvement in every stage of the research process, from framing research questions to dissemination of results). Research on the outcomes of patient involvement is largely qualitative, making it difficult to arrive at generalizable conclusions. Positive results often are assumed without being empirically demonstrated. That said, the literature suggests patient involvement can lead to benefits for all stakeholders, including increased legitimacy and transparency, better alignment of research agendas with outcomes that patients value, higher data quality and better communication of results to lay audiences. Other sources, however, highlight barriers to incorporating a patient-centered perspective, such as resistance to diverting research resources, defensiveness relating to researchers' expertise and traditional practices and the time and effort necessary to include patients in an already lengthy R&D process. **CONCLUSIONS:** While there is a growing literature on patient involvement in industry research, the current lack of robust evidence on the outcomes of patient involvement hinders effective inclusion of patients. Further development of a science of patient involvement is a necessary step for broadening and strengthening industry inclusion of patients in the drug development process.

**PHP2****ARE THE ELDERLY CITIZENS READY FOR ASSISTED LIVING TECHNOLOGIES? AN ITALIAN CASE STUDY**

Cavallo F<sup>1</sup>, Trieste L<sup>2</sup>, Esposito R<sup>1</sup>, Aquilano M<sup>1</sup>, Dario P<sup>1</sup>, Turchetti G<sup>2</sup>

<sup>1</sup>Scuola Superiore Sant'Anna, Pontedera (Pisa), Italy, <sup>2</sup>Scuola Superiore Sant'Anna, Pisa, Italy

**OBJECTIVES:** The aim of the paper is to analyze the needs and attitude of elderly people towards technology, as a prelude for designing and testing new healthcare and assistance services. **METHODS:** Focus groups and questionnaires administered in Tuscany (Italy) to a) over 65 resident in their home, living alone, with no cognitive impediments; b) formal and c) informal caregivers. **RESULTS:** What the elderly need can be summarized into indoor and outdoor safety and protection services. According to the elderly people the preferred solution to meet these needs is a mix of: increasing frequency of contacts with caregivers, maintaining social relations, improving their indoor autonomy. On these premises 72% of the interviewed sample would be interested in using telemedicine platform for monitoring their health conditions; 73.5% would improve their house safety by using technology; 53% would adopt ICT technology and sensors to monitor their home when they are in or out. 47% would adopt tele-gym for making simple exercises everyday. 68% believes that a video-call system could be an useful solution to keep in touch with relatives and friends. These answers are related to a population characterized by 71% of under 75 and 85% of over 75 with some disease; 10% of over 75 citizens is not self-sufficient; 32% of under 75 and 73% of over 75 citizens receive a concrete help by formal and informal caregivers. **CONCLUSIONS:** Results show a high interest of the elderly people in services delivered with ICT technology and sensors for supporting their daily activities, improving safety and reducing the related healthcare resource consumption.

**PHP3****BUILDING INTENTIONS WITH THE THEORY OF PLANNED BEHAVIOUR: A QUALITATIVE ASSESSMENT OF SALIENT BELIEFS ABOUT PHARMACY VALUE ADDED SERVICES IN MALAYSIA**

Hoay TL<sup>1</sup>, Hassali MA<sup>2</sup>, Saleem F<sup>1</sup>, Gan V<sup>3</sup>

<sup>1</sup>Universiti Sains Malaysia, Penang, Malaysia, <sup>2</sup>Universiti Sains Malaysia (USM), Pulau Pinang, Malaysia, <sup>3</sup>Universiti Putra Malaysia, Serdang, Malaysia

**OBJECTIVES:** In order to improve pharmaceutical care delivery in Malaysia, Ministry of Health introduced the concept of Value Added Services (VAS) in pharmacy. Despite the reported convenience and advantages of VAS, it is noticed that utilization rate of VAS is low in the country. The study aims to explore patients' understanding, salient beliefs and expectations towards VAS in Malaysia using the Theory of Planned Behaviour (TPB) as a theoretical model. **METHODS:** A qualitative methodology was used whereby face-to-face interviews were conducted with 12 patients who collected partial medicine supplies from government pharmacies. Participants were recruited using purposive and snowball sampling method in the State of Negeri Sembilan, Malaysia. Interviews were audio-recorded. Verbatim transcription and thematic content analysis were performed on the data. **RESULTS:** Thematic content analysis yielded five major themes. (1) Attitudes towards using VAS, (2) subjective norms, (3) perceived behavioural control, (4) lack of knowledge and understanding of VAS and (5) expectations toward VAS. **CONCLUSIONS:** The interviews explored and informed new information about salient beliefs towards pharmacy VAS in Negeri Sembilan, Malaysia. The findings suggest that VAS is still in its infancy and a more robust and effective advertising and marketing campaign is needed to boost the adoption rate. Behavioural attitudes, subjective norms and perceived control elements were discussed and serve as important variables of interest in future study. Expectations towards VAS serve as an important guideline to further improve patient-oriented services.

**PHP4****ANALYSIS OF HEALTH SERVICES UTILIZATION AMONG ELDERLY IN SLOVENIA**

Hren R<sup>1</sup>, Prevornik Rupel V<sup>2</sup>, Srakar A<sup>2</sup>

<sup>1</sup>University of Ljubljana, Ljubljana, Slovenia, <sup>2</sup>Institute for Economic Research, Ljubljana, Slovenia

**OBJECTIVES:** To analyze health services utilization among elderly in Slovenia. **METHODS:** Health services utilization among elderly depends on many factors. However, it is important to realize that older people in their consumption of health care services are not a homogeneous group as they may be particularly exposed to personal income and social inequalities. To better understand the factors that influence the use of health care resources among the elderly in Slovenia, we used a database of Wave 4 of the Survey of Health, Ageing and Retirement in Europe (SHARE). The SHARE data were self-reported and included indicators of health services utilization, such as the number of contacts with general practition-